

The *software* of the CAP performs the functions of gathering analog (and/or digital) program signals from a variety of sources such as broadcast television, premium channels, and video disk. The software also *packages the programs efficiently for the available bandwidth* and for subscriber viewing through computer assisted creation of program line-up and allocating of bandwidth.

(Emphasis added). Later, on page 75, lines 16-24, the specification explains the features of priority levels of programming for different system *bandwidth* capacities:

In order to accommodate cable TV systems that have different bandwidths and channel capacities, the television programming and television program control information may be divided into parts such as priority one, two and three. The large bandwidth cable TV systems can accommodate all the parts of the television programming and all parts of the television programming control information. Those cable TV systems with a more limited bandwidth are able to use the program delivery system 200 by only accepting the number of parts that the cable system can handle within its bandwidth.

Then, on page 77, line 24 to page 78, line 11, the specification explains a method for stripping a signal from the Operations Center:

A second method requires a set of transponders to be assigned to each priority level and the cable headend 208 to route signals from the transponders corresponding to the proper priority level ... This method requires the *Operations Center 202 to properly assign programs* to transponders by priority level. This can be *accomplished by the CAP using the software* described earlier (e.g., Figure 8 at 438 and 440).

(Emphasis added). Therefore, the specification describes in these passages that the CAP software gathers and “properly assigns” programs (*i.e.*, selects programs) by priority level (*i.e.*, bandwidth requirements). By doing such, the software “*packages the programs efficiently for the available bandwidth.*” Efficiently packaging the programs for the available bandwidth inherently must be based on the bandwidth requirements of each program. Therefore, since the specification states that the selecting step may be performed by the CAP software, the specification clearly enables the step of selecting specific programs using an algorithm to select specific programs based on each programs’ bandwidth requirement.

Likewise, on page 78, lines 12-24, the specification explains another method for stripping a signal from the Operations Center:

The third and the preferred method is for the cable headend 208 to *pick and choose* programming from each transponder and create a *customized priority one, two, and three signal* with chosen television programming. The cable headend

208 would then route the appropriate customized signal to each part of the concatenated cable system 210 that the cable headend 208 serves. This third method requires that the cable headend 208 have a component, such as the combiner (described in greater detail in a co-pending U.S. Patent Application entitled Digital Cable Headend For A Cable Television Delivery System, Serial No. 08/160,283, filed December 2, 1993, owned by the assignee of the present application) which can *select among programs* prior to combining the signal for further transmission on a concatenated cable system 210.

Therefore, in this section the specification explicitly describes a component (the combiner) of the cable headend selecting programs to create customized priority signals (*i.e.*, signals of a certain bandwidth). Since the combiner is combining selected programs to create customized priority signals, each program's bandwidth requirements are clearly a basis for the creation of the different bandwidth priority signals. Consequently, since the specification describes the combiner as performing this step, the specification clearly enables an algorithm being used for the step of selecting specific programs using an algorithm to select specific programs based on each programs' bandwidth requirement.

On page 3 of the Office Action rejects claims 1-2 and 4-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,253,275 to Yurt et al. (hereafter Yurt) and U.S. Patent 5,115,309 to Hang (hereafter, Hang). This rejection is respectfully traversed.

The Examiner states, on page 4 of the Office Action, that Hang discloses selecting and/or allocating bandwidth to programs based on each programs' bandwidth requirement. However, a thorough examination of Hang reveals that it does not disclose the claim 1 step of selecting specific *programs* received from television programming sources, wherein the step of selecting uses an algorithm to select specific *programs* based on each programs' bandwidth requirement. In the cited columns 3 and 4 of Hang, Hang describes a video splitter 101 splitting a VIDEO IN signal into *sub-images*, each *sub-image* comprised of one SUB-VIDEO 106 signal. A *sub-image* is not a *program*. Therefore, this section does not disclose or suggest the missing step.

Likewise, in the cited columns 9 and 10, Hang states that the "bandwidth allocation scheme could be employed if each video coder was processing *image* streams *derived* from separate video sources rather than a sub-image of an original image...each signal SUB-VIDEO 106 would be supplied from a video source." Again, *image* streams are not programs. Moreover, Hang describes, in the Summary of the Invention, that the bandwidth allocation scheme allocates bandwidth based on an indication of *sub-image* complexity (not based on

programs' bandwidth requirements). Finally, by referring to the signals supplied from video sources as "SUB-VIDEO 106", which are defined as comprising *sub-images* (see Col. 3, lines 29-30), Hang is clearly not suggesting that these image streams are programs. Consequently, Hang fails to disclose or suggest the missing step. Since Yurt fails to disclose selecting specific programs received from television programming sources, wherein the step of selecting uses an algorithm to select specific programs based on each programs' bandwidth requirement, as admitted on Page 4 of the Office Action, the combination of Yurt and Hang fail to render obvious claim 1. Consequently, claim 1 is allowable.

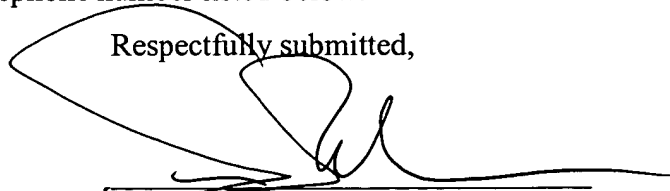
Dependent claims 2 and 4-7 are allowable for at least the reasons provided above, as well as for the additional features that they include. Applicants respectfully traverse the Office Notice taken on Page 5 that it is well known in the art to select programs based on buy rates, programs watched and marketing information. It is immaterial that broadcasters have based programming decisions and advertising rates on Nielsen ratings. The Examiner has failed to show that selecting specific programs received from television programming sources using algorithms to select specific programs based on buy rates, programs watched information, or marketing information of the programs are well known in the art. Because these specific steps are not shown as being taught by the prior art, claims 4-7 are allowable.

For at least the reasons set forth above, applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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